

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (cancelled)

2. (currently amended): The ~~camshaft as claimed in claim 1~~ method as claimed in claim 15, characterized in that the shaft (~~13~~) is of tubular configuration.

3. (currently amended): The ~~camshaft as claimed in claim 1~~ method as claimed in claim 15, characterized in that the shaft (~~13~~), in the sections in which the cams (~~30, 30'; 36, 36'; 46, 46'~~) are placed, has an enlarged external diameter.

4. (currently amended): The ~~camshaft~~ method as claimed in claim 3, characterized in that, in the sections having the enlarged external diameter, circumferential beads (~~14, 15~~) are incorporated in the shaft.

5. (currently amended): The ~~camshaft~~ method as claimed in claim 3, ~~characterized in that the cams (30', 46') have~~ further comprising forming on the inner side of the cam a ring means (~~12, 32~~) for creating a positive connection to the shaft (~~13~~).

6. (currently amended): The ~~camshaft~~ method as claimed in claim 5, characterized in that the ring means for creating a positive connection comprises projections (~~12~~) or ribs (~~32~~) which protrude radially inward.

7. (currently amended): The ~~camshaft as claimed in claim 1~~ method as claimed in claim 15, characterized in that the free ends of the cams (~~30, 30'; 36, 36'; 46, 46'~~) are welded together by means of resistance welding.

8. (currently amended): The ~~camshaft~~ method as claimed in claim 7, ~~characterized in that the cams have~~ further comprising forming a recess (~~41~~) in the region of the a weld seam (~~29~~) on the an inner side of the ring, which recess receives the a bead (~~31~~) formed during the welding.

9. (currently amended): The ~~camshaft as claimed in claim 1~~ method as claimed in claim 15, characterized in that the cams (36, 36') are produced in such a way from a profile strip (34, 34') of thickness which varies over the strip length that the cams (36, 36') enclose the shaft (13) with an angle of enclosure (UW) which is greater than the angle of enclosure which is predefined by the cam profile if the strip thickness is constant, and in particular measures 360°.

10. (currently amended): The ~~camshaft~~ method as claimed in claim 9, characterized in that the process accommodates a profile strip (34') ~~has~~ having two shoulders (37, 38) disposed symmetrically to a center plane.

11. (currently amended): The ~~camshaft~~ method as claimed in claim 9, characterized in that the process accommodates a profile strip (34) ~~has~~ having in the middle a thickening (35).

12. (currently amended): The ~~camshaft as claimed in claim 1~~ method as claimed in claim 15, characterized ~~in that~~ by producing the cams (46, 46') ~~are produced~~ from a profile strip (17, 17') of constant thickness, and in that, on ~~the an~~ an inner side of ~~the a~~ a ring of the cam, ~~the an~~ an angle of enclosure (UW) is enlarged by a forming process, ~~in particular is brought to 360°~~.

13. (cancelled)

14. (currently amended): The ~~camshaft as claimed in claim 1~~ method as claimed in claim 15, characterized in that the cams (30, 30'; 36, 36'; 46, 46') are produced from a profile strip (17') which has two layers (17a, 17b) of different material lying one above the other.

15. (currently amended): A method for producing a camshaft ~~as claimed in claim 1~~, ~~in which method~~ having a shaft with at least one annular cam, comprising:

~~cams (30, 30'; 36, 36'; 46, 46') are produced~~ producing one or more cams from one or more profile strips (17, 17'; 34, 34') by bending, respectively, each said strip having opposed free ends, by subjecting each said strip to a first forming step that provides a bent strip with an elevation, then subjecting said bent strip to a second forming step, wherein said second forming step provides the impression of an indentation and transports material outward in an axial direction in a region of the elevation of the cam and heaps up the material, and then subjecting said bent strip to a third forming step such that the finished cam has an annular form and can

enclose the shaft with an angle of enclosure of 360°, and subsequently welding together of the free ends and are then fastened;

sliding said at least one cam with an annular form onto the shaft; and

fastening said at least one cam on a the shaft (13) at a predefined location and in a predefined alignment, characterized in that the cams (30, 30'; 36, 36'; 46, 46') are being positively and/or non-positively connected to the shaft (13) by being slid onto the shaft (13).

16. (currently amended): The method as claimed in claim 15, characterized in that the shaft (13) is first enlarged in terms of the external diameter in a section which is earmarked for the seat of a cam, and in that the associated cam is subsequently slid onto this section of the shaft (13).

17. (currently amended): The method as claimed in claim 16, characterized in that, for the enlargement of the external diameter, circumferential beads (14, 15) are created on the shaft (13) by a rolling operation.

18. (currently amended): The method as claimed in claim 15, characterized in that, for the production of the cams (36, 36'), a profile strip (34, 34') of varying thickness is used, such that the cams (36, 36') enclose the shaft (13) with an angle of enclosure (UW) which is greater than the angle of enclosure which is predefined by the cam profile if the strip thickness is constant, and in particular measures 360°.

19. (currently amended): The method as claimed in claim 15, characterized in that, on the inner side of the ring of the cams (30', 46'), means (12, 32) for creating a positive connection to the shaft (13) are produced by a forming process, which means comprise, in particular, projections (12) or ribs (32) which protrude radially inward.

20. - 21. (cancelled):

22. (currently amended): The method as claimed in claim 15, characterized in that the profile strips (17, 17'; 34, 34') are created from a round wire by forming methods, in particular by rolling methods.

23. (new): The method as claimed in claim 15, further comprising:

using a forming tool having on its top side an upwardly protruding head part which is laterally joined by two lower-lying circular, arc-shaped shoulders, where a radius of the shoulders is chosen such that it equates to a radius of an opening in the cam enclosing the shaft.